

STAINLESS STEEL SAFETY RELIEF VALVE

TYPE RXSO-S

0 to 400 PSIG



APPLICATIONS

- Especially recommended where corrosive or expensive gases benefit from stainless steel construction
- Stationary Cryogenic storage tanks
- Dual Safety relief systems
- Overpressure relief of tanks, pipelines, vessels, pumps
- Air and gas compressors
- Corrosive industrial applications



FEATURES

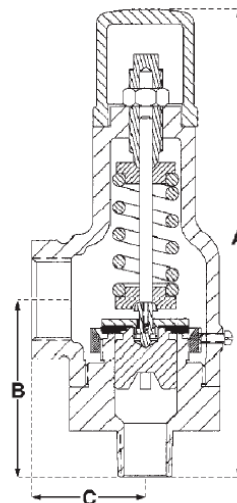
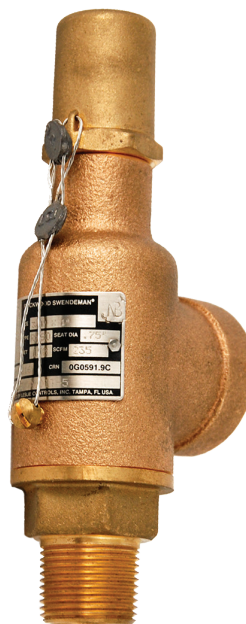
- Special Teflon® seat, making bubble-tight seals possible to over 90% of set pressures per spec API 527; not applicable to steam
- Adjustable blowdown ring
- Cleaned and packaged for use in O₂ service in compliance with the CGA specifications G-4.1

Additional cleaning specifications:

- 4WPI-SW70003
- ES.660.503
- GS-38
- GS-40
- Electro-polishing of base and proper assembly for high purity and electronic applications

Testing:

Each valve is set, tested, re-tested and sealed at the factory to the customer's specifications.



Valve Size:

Inlet: 1/2" to 1"

Outlet: 3/4" to 1-1/4"



TECHNICAL DATA

Materials of Construction:

Shell	Investment Cast 316SS, A.S.M.E SA-351
Base	Investment Cast 316SS, A.S.M.E SA-351
Trim	316SS, A.S.M.E SA-479
Spring	Stainless Steel 17-7 PH A.S.T.M A-313, Type 631



OPERATING RANGES

Temperature	-423° F to +400° F
Set Pressures	0 to 400 PSIG



OPTIONS

- Large and Extra Large Capacity Consult factory for flow rates
- BSP threads are available on most sizes
- Lever operation



APPLICABLE CODES

Designed and manufactured to meet:

- CGA S-1.2 and S-1.3
- API 527
- V-4301 (Cryogenic Non-Oxygen)
- AD-Merkblatt A2
- V-4401 (Oxygen)
- CRN 0G0591.9
- ASME sec.VIII

TYPE RXSO-S



DIMENSIONS & CHARACTERISTICS

Air Capacity Table

Discharge capacities in cubic feet per minute of air at 10% or 3 PSI, whichever is greater, overpressure.

Inlet Sizes Inches	1/2 3/4	1/2 3/4 1
Outlet Sizes Inches	3/4 1	1-1/4
Seat Diameter Inches	A 0.750	B 1.000
Flow Area	0.118	0.204

Set Pressure		
10	36	63
15	43	74
20	48	85
25	55	96
30	62	108
35	70	120
40	77	133
45	84	145
50	91	157
55	98	170
60	105	182
65	113	195
70	120	207
75	127	220
80	134	232
85	141	244
90	149	257
95	156	269
100	163	282
105	170	294
110	177	307
115	184	319
120	192	331
125	199	344
130	206	356
135	213	369

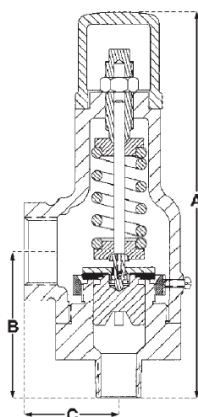
Inlet Sizes Inches	1/2 3/4	1/2 3/4 1
Outlet Sizes Inches	3/4 1	1-1/4
Seat Diameter Inches	A 0.750	B 1.000
Flow Area	0.118	0.204

Set Pressure		
140	220	381
145	228	393
150	235	406
155	242	418
160	249	431
165	256	443
170	264	456
175	271	468
180	278	480
185	285	493
190	292	505
195	299	518
200	307	530
205	314	543
210	321	555
215	328	567
220	335	580
225	343	592
230	350	605
235	357	617
240	364	629
245	371	642
250	378	654
255	386	667
260	393	679
265	400	692

Inlet Sizes Inches	1/2 3/4	1/2 3/4 1
Outlet Sizes Inches	3/4 1	1-1/4
Seat Diameter Inches	A 0.750	B 1.000
Flow Area	0.118	0.204

Set Pressure		
270	407	704
275	414	716
280	422	729
285	429	741
290	436	754
295	443	766
300	450	779
305	458	791
310	465	803
315	472	816
320	479	828
325	486	841
330	493	853
335	501	866
340	508	878
345	515	890
350	522	903
355	529	915
360	537	928
365	544	940
370	551	952
375	558	965
380	565	977
385	572	989
390	580	1002
395	587	1015
400	594	1027

NOTE: Pressure Settings below 15 PSIG (1.034 barg) are non code



DIMENSIONS & WEIGHTS

RXSO-S	Inlet (in)	Orifice	Outlet (in)	Max P (psi)	A Overall Height	B Overall Height	C Overall Width	Weight (lb)
76**ACD	0.5	A	0.75	400	5.78	2.44	1.34	2
76**ACE	0.5	A	1	400	6.41	2.69	1.69	3
76**ADD	0.75	A	0.75	400	5.905	2.565	1.34	2
76**ADE	0.75	A	1	400	6.535	2.815	1.69	3
76**BCF	0.5	B	1.25	400	7.492	2.992	1.88	3
76**BDF	0.75	B	1.25	400	7.492	2.992	1.88	4
76**BEF	1	B	1.25	400	7.492	2.992	1.88	5

NOTE: Codes used for 760 and 765 series